



Matrix Switch with STM-1/OC-3 and Gigabit Ethernet Model 6511

Move data rapidly with the Patton 6511 Matrix Switch and get non-blocking any-to-any TDM access, Packet Switched Ethernet, and high-speed trunking...all in a single card

Non-Blocking I/O Fabric

Get dedicated connectivity to every input and every output port while grooming TDM or switching packet data

Integrated STM-1/OC-3 DACS

Resolve traffic down to 64 kbps timeslots, switch any timeslot to any port or loop it back

Optical or Electrical Egress

Choose between short-haul electrical BNC or intermediate-range optical SC connectors

Hot Swappable and Redundant

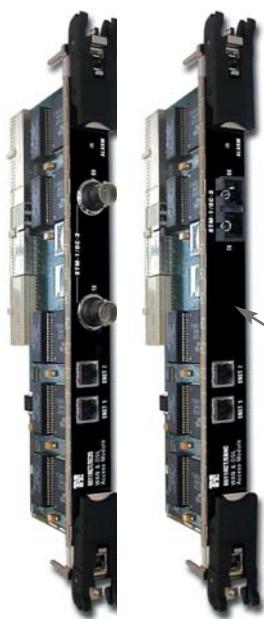
For critical applications use dual 6511s and get 1+1 redundancy. Hot-swap cards for fast main-

Redundant Packet Switching

Reliable packet switching architecture ensures redundant paths for deploying mission-critical

WEB/SNMP Manageable

Get fault detection and resolution standard. Use the embedded HTTP/SNMP agent to man-



6511RCT STM-1 Trunk Module

Choose intermediate optical or short-haul electrical channelized STM-1/OC-3 interfaces. Dual 10/100/1000 Mbps switched Ethernet ports for system packet aggregation.



6511RC Matrix

Get high speed channelized DACS, timeslot mapper, and layer 2 packet aggregation. Use with 6511RCT and get high speed network access from DS-3 and STM-1/OC-3.

The Patton Model 6511 Matrix Switch is an integrated multimedia switching engine complete with a digital access cross-connect, high-speed STM-1/OC-3 trunk interface, wire-speed Ethernet packet switch, and GUI management system.

The Model 6511's flexible channel switching fabric allows non-blocking switching from any input to any output. The Channelized STM-1/OC-3 interface integrates into a SDH/SONET network, enabling users to channelize an STM-1/OC-3 down to 64 kbps timeslots. With full grooming capability the Model 6511 DACS allows any-to-any TDM mapping and can place any channel from any card onto any port.

Combined with the ForeFront AIS Packet-Switched Backplane, the Model 6511 redundantly interconnects every slot, at wire-speed, and aggregates traffic from each system card onto dual-switched uplink Ethernet ports. With increased performance and throughput, the

packet backplane allows non-blocking access to the Model 6511, other system cards, and the uplink ports.

With the Forefront architecture, TDM and packet can be used simultaneously and to full capacity. In a system loaded with dual 6511's, the high speed channel switching and packet backplane on the Model 6511 offers 1+1 redundancy.

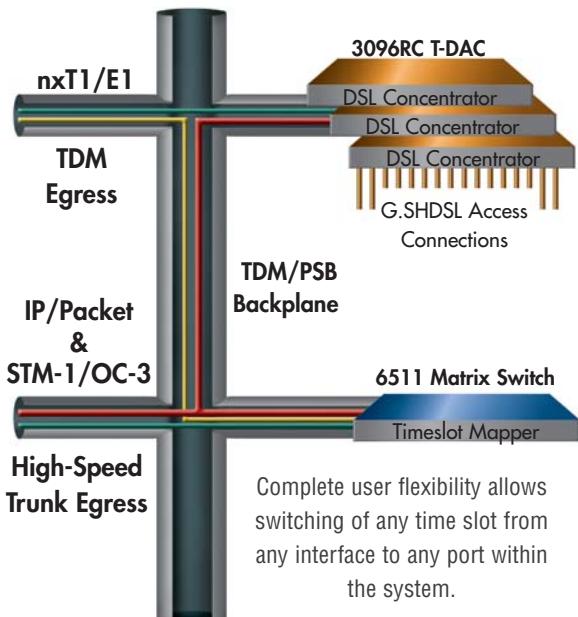
Management is a snap with VT-100, TELNET, SNMP and WEB options. Manage traffic out-of-band via dual 10/100/1000 Ethernet ports or terminate PPP/FR via timeslots in-band. With the integrated L2/L3 switch the Model 6511 provides management access to all cards within the chassis

Master time and space with the Model 6511 Matrix Switch and realize an unequalled level of density and control over the new convergent network.

Visit www.patton.com for more information.

Backplane Diagram

The ForeFront architecture guarantees total non-blocking operation for any TDM application and for Packet switching applications over the redundant Packet Switching Bus (PSB). With the ability to simultaneously transmit and receive on both full-duplex 10/100/1000 Ethernet up-link ports, the 6511RC offers unparalleled switching to any DSL, E1, STM-1/OC-3 media as well as redundant PSB and TDM buses.



ForeFront System Elements

ForeFront Next Generation DSL Network Access



Patton's ForeFront Access Solutions for DSL address the new point-of-presence requirements demanded by today's providers operating IP and TDM networks. Using a modular approach, the ForeFront AIS includes all system components to provide DSL access. Fully redundant power and integrated cooling enable the lightweight chassis to scale for density and services. DSL line cards offer the latest ITU/ETSI G.SHDSL technology for true standards based connectivity. Grooming facilities and high speed softswitch allow any-to-any cross-connecting to T1/E1s or STM-1/OC-3 interfaces. Integrated management gives command over the entire system end-to-end and offers tools for fault detection, isolation, and correction.

Specifications

Line Framing	DS1-SF, SLC-95, ESF, E1-G.704 basic, CRC-4 multi-frame (G.706 framing), DS3-M23, C-bit parity formats, E3-G.751, G.832 E3, STM-1-G.707, SONET/STS-3-Per ANSI T1.105-2001	Ethernet Ports	Dual 10/100/1000 Base-T (RJ-45 connector)
Mapping	DS1-VT1.5 -> STS-1 SPE, TU-11 -> STM1/VC3, TU-11 -> TUG3 -> STM1/VC4, TU12 -> STM1/VC3, TU-12 -> TUG3 -> STM1/VC4; E1-VT2 -> STS1 SPE, TU-12 -> STM-1/VC3, TU-12 -> TUG3 -> STM-1/VC4; DS3-DS3 -> VC3 -> AU3 -> STS-1 SPE; STM-1 -G.707; SONET/STS3- Per ANSI T1.105.02-2001	STM-1/STS-3 Ports	Single mode dual SC fiber (20km) per G.957 using 1310 nm lasers per G.652 or Dual 75-Ohm BNC per G.703
Clocking	STM-1-G.813; STS-3 - ANSI T1.101-1999, T1.105.09-1995, G4-1244	LED Indicators	LEDs for power, CPU, Dual Ethernet, test mode, egress synchronization, egress trunk status
Error Counts	G.821 & G.826 (ES, SSES, US, EB, and BBE; T1.231 & GR-253-CORE ES, SES, US and SEFS	Management Services	HTTP, SNMP, TELNET Ethernet, RS-232 Console Port, SYSLOG Client, Remote Software Upgrade via FTP
Line Testing	PRBS per ITU-T 0.151 & 0.152; DS3/E3 Diagnostic & Line Loopback; DS2 Demux Loopback; T1/E1 Diagnostic & Loopback	Alarm Reporting	Configurable alarms; Remote SNMP Traps; Front Panel LEDs
		Compliance	Safety: UL/CSA per UL1950 (METS) Canadian cMET and CS-03. EMC Directive 89/336/EEC, FCC Part 15, CE Mark, CTR12, CTR13 FCC Part 68. Laser Safety: Class 1, IEC-825-1, 1993
		Environment	Operating temperature: 14 to 140°F (0 to 60°C); Humidity: 5 to 90%, non-condensing